

J.Chelladurai

Assistant Professor

Department of Electrical & Electronics Engineering

PSG College of Technology, Coimbatore – 641 004

e-mail:jcd@eee.psgtech.ac.in



EDUCATION

DOCTORATE

(Pursuing*)

Power Electronics

Anna University, Chennai

POSTGRADUATE

(May 2008)

Power Systems

National Institute of Technology, Trichy

UNDERGRADUATE

(May 2000)

Electrical and Electronics Engineering

Government College of Technology, Coimbatore

Bharathiyar University

EXPERIENCE

September 2010 to till date

Assistant Professor, PSG College of Technology, Coimbatore

June 2008 to August 2010

Lecturer, Department of EEE, PSG College of Technology, Coimbatore

July 2001 to August 2006

Lecturer, Department of EEE, Bharathiyar College of Engineering and Technology,

Karaikal

COURSES HANDLED

UNDERGRADUATE

1. Electric Circuits
2. Network Theory
3. Electronic Devices
4. Electronic Circuits
5. Power Electronics
6. HVDC Transmission
7. Solid State Relays
8. Basic Electrical and Electronics Engineering

POSTGRADUATE

1. Power Semiconductor Devices
2. Power Converters and Analysis
3. Simulation of Power Electronic Systems
4. Advanced Topics in Power Electronics
5. Power Electronics in Wind and Solar Power Conversion
6. Power Quality Management
7. Flexible AC Transmission Systems
8. Power Electronics Applications to Power Systems

RESEARCH AREAS

- FACTS Devices
- Power Quality
- Power Converters

PUBLICATIONS

INTERNATIONAL JOURNALS

1. J.Chelladurai, B.Vinod, “Performance Evaluation of Three Phase Scalar Controlled PWM Rectifier using Different Carrier and Modulating Signal” Journal of Engineering Science and Technology, Vol. 10, No. 4 (2015) pp-420-433.
2. J.Chelladurai, B.Vinod, T.Bogaraj, J.Kanakaraj, M.Sundaram, “Scalar Controlled Boost PWM Rectifier for Micro Wind Energy Systems”, International Research Journal of Applied Sciences, Engineering and Technology, 10(1): 2015, pp-35-44.
3. T. Bogaraj, J. Kanakaraj, J. Chelladurai, “Modeling and simulation of stand-alone hybrid powersystem with fuzzy MPPT for remote load application” Archives of Electrical Engineering, Vol. 64(3), 2015, pp. 487-504.
4. J. Joe Brislin, J. Chelladurai, B. Vinod, M. Sundaram “Modulation Strategies For Three Phase Inverters Supplying Unbalanced Three Phase Loads” International Journal of Innovative Research in Science, Engineering and Technology, Vol 3,2014, pp-30-37.
5. J.Chelladurai ,G.SaravanaIlango, C.Nagamani and S.Senthilkumar, “Investigation of Various PWM Techniques for Shunt Active Filter” International Journal of Electrical Systems Science and Engineering” Volume 1 Number 2, spring 2008, pp-87-93.

NATIONAL JOURNALS

1. J.Chelladurai, G.SaravanaIlango, C.Nagamani and D.Aravindan, “DSP based Laboratory Implementation of SVPWM for Shunt Active Filter”, National journal of Technology, vol 7, No 1, March 2011,pp-65-72.

INTERNATIONAL CONFERENCES

1. J.Chelladurai, B.Vinod, G.Karthik and M.Bhupathisubramani, “A Novel Cost Effective Single Phase SAF for Non Linear Loads”, International Conference on Electrical Power and Energy Systems, National Institute of Technology Bhopal, Aug. 26-28, 2010.

NATIONAL CONFERENCES

1. J.Chelladurai, G.SaravanaIlango, D.Aravindan and J.R.Aldous Huxley, “Modeling and simulation of STATCOM using SVPWM Technique”, IEECONS-07, Kumaraguru College of Technology, Coimbatore– March 20-21, 2009.

SEMINARS / CONFERENCES ORGANISED

- Organized National level workshop on “**LV Switchgear and Reactive Power Management Techniques**” 29-07-2011 to 30 -07-2011
- Organized National level workshop on “**LV Switchgear and Reactive Power Management Techniques**” 05-08-2011 to 06-08-2011
- Organized DRDO sponsored National level workshop on” **Power Quality Issues and Improvement**” 28-09-2012 to 29-09-2012
- Organized DRDO sponsored National level workshop on“**Design, Simulation and Analysis of Brushless Permanent Magnet Motor**” 09-11-2012 to 10-11-2012.
- Organized CSIR sponsored National workshop on “**Renewable Energy Systems**” 07-12-2012 to 08-12-2012.
- Organized two day National level workshop on “**Solar PV Design Considerations for Industry, Agriculture, and Domestic Applications with Economics**” 30-08-2013 to 31.08.2013.
- Organized one day National level seminar on “**Low Voltage Switchgear**” 26.10.2013.
- Organized national level workshop on **Research Perspectives in Power System Deregulation and Restructuring**” 31-01-14 to 01-02-2014.
- Organized National level workshop on “**Rudiments and Assortment of Variable Frequency Solid State AC Drives for Energy Conservation**” 14-02-2014 to 15-02-2014.
- Organized National level workshop on “**MATLAB Applications to Modeling & Simulation of Power Electronic Systems**” 28-03-2014 to 29-03-2014.

- Organized National level workshop on “**FPGA Based Control of Permanent Magnet & Reluctance Motors for Energy Efficient Industrial Drives**” 06-08-2015 to 07-08-2015.

SEMINARS / CONFERENCES ATTENDED

- Special training program on “**LV Switchgear**”, L&T Switchgear Training Centre, Coonoor” 11-11-2008 to 13.11.2008.
- Short term course on “**Power Quality and Energy Management Perspectives in Indian Industries**”, Coimbatore Institute of Technology, Coimbatore, 24-07-2009 to 25-07-2009.
- AICTE-QIP sponsored short term course on “**Renewable Energy Electric Conversion System**”, National Institute of Technology, Trichy, 14-12-2009 to 18-12-2009.
- QIP short term course on “**Intelligent Systems Application to the Smart Electric Grid Solution**”, Department of EEE, Indian Institute of Technology, Kanpur, 15-11-2010 to 19-11-2010.
- ISTE workshop on “**Solar Photovoltaics: Fundamentals, Technologies and Applications**”, ISTE-IITB workshops, sponsored by MHRD, Govt. of India, IIT Bombay, 12-12-2011 to 22-12-2011.
- National Workshop on “**Mathematics for Electrical and Mechanical Sciences**”, PSG College of Technology, 02-03-2012 to 03-03-2012.
- TEQIP Sponsored Faculty Development Programme on “**Research Methodology and Optimization Techniques**”, AlagappaChettiar College of Engg. & Technology Karaikudi 17-12-2012 to 23-12-2012.
- AICTE sponsored STTP program on “**Computational Intelligence in Smart Electric Power Grid**”, Department of EEE, SRM University Chennai, 01-04-2013 to 06-04-2013.
- TEQIP sponsored Faculty Development Training Programme “**Short Course on Economics and Financing of Renewable Energy Technologies**”, IIT Delhi, 24-07-2013 to 27-07-2013.
- One Week Short Term Course on “**Advanced Control Theory for Electrical Engineering Applications**”, Conducted by CIT Coimbatore, 13-10-2014 to 19-10-2014.
- One week short term course on “**Control Systems**”, Conducted by National Mission on Education through Information and Communication Technology, IIT Kharagpur, 02-12-2014 To 12-12-2014.
- FDP on “**Control Engineering Analysis & Design with MATLAB/SIMULINK**”, Indian Space Science and Technology Trivananthapuram, 15-12-2015 To 18-12-2015.

SPECIAL LECTURES DELIVERED

- Special lecture delivered in national level workshop on LV Switchgear and Reactive Power Management Techniques Topic: **Emerging Trends in Reactive Power Management Techniques** on 29th July 2011 conducted by PSG College of Technology.
- Special lecture delivered in National level workshop on Wind Energy Systems Topic: **Applications of Power Electronics in Wind Energy Conversion System** on 12th August 2011 conducted by PSG College of Technology.
- Special lecture delivered in DRDO sponsored National level workshop on Power Quality Issues and Improvement Topic: **Power Quality Improvement using Power Electronic Converters** on 28th September 2012 conducted by PSG College of Technology.
- Special lecture delivered on “**Introduction to MATLAB/Simulink**” in **PSG Arts** -21st February 2013.
- Special lecture delivered in national level work shop on Research Perspectives In Power System Deregulation and Restructuring Topic: **Reactive Power Management and Role of FACTS Devices in Deregulated Power System** on 31st January 2014 conducted by PSG College of Technology.
- Special lecture delivered in national level work shop on “**Rudiments and Assortment of Variable Frequency Solid State AC Drives for Energy Conservation**” Topic: Simulation of PWM Inverter on 15th February 2014 conducted by PSG College of Technology.
- Special lecture delivered in national level work shop on MATLAB Applications to Modeling & Simulation of Power Electronic Systems Topic: **Modeling & Simulation of DC to DC Converter** on 28th March 2014 conducted by PSG College of Technology.
- Special lecture delivered in FDP on Power System Protection & Switch Gear Topic: **Protective relays** on 23rd June 2014 conducted by PSG College of Technology.
- Special lecture delivered in FDP on power electronics Topic: **PWM techniques for inverters** on 27th June 2014 conducted by Kathir College of Engineering, Coimbatore.

SPONSORED / CONSULTANCY ACTIVITIES

- Co-PI in Design & Development of Smart Autonomous In-service Inspection and Cleaning Ground Vehicle for Large Scale Solar PV Farms sponsored by Department of Science and Technology (DST) - Solar Energy Research Initiative (SERI).

- Co-PI in Centre of Excellence in Welding Engineering and Technology – Development of Welding Power Source sponsored by Department of Heavy Industries (DHI).

AWARDS

1. Recipient of **Dakshinamoorthy** award for Teaching Excellence- Academic Year 2011 – 2012.

MEMBERSHIP OF PROFESSIONAL BODIES

- Indian Society for Technical Education (ISTE)

PROJECT GUIDANCE / SUPERVISION

Number of PG Project Guided: 17

Number of UG Project Guided: 10